We claim:

1. A fuel cell powered information appliance comprising:

an information appliance having a processor for executing computer instructions;

a memory or register communicatively coupled to said processor;

a fuel cell generating electrical power and coupled to at least one of said processor and said memory for providing operating power (voltage and current) to operating electrical circuits within said processor and memory.

2. The information appliance in Claim 1, wherein said information appliance comprises a notebook computer.

3. The information appliance in Claim 1, wherein said information appliance comprises a personal data assistant.

4. The information appliance in Claim 1, wherein said fuel cell is integrated within a common housing that houses said processor.

5. The information appliance in Claim 1, wherein said fuel cell is disposed external to a housing that houses said processor and provides said generated electrical power to said processor via an electrical conductor.

6. The information appliance in Claim 1, wherein said fuel cell comprises a methanol fuel cell.

7. A fuel cell powered notebook computer.

8. A power pack adapted to provide electrical operating power to an electrical device, said power pack comprising:

a fuel cell assembly;

an electrical interface circuit receiving a voltage and current from said fuel cell assembly and generating an electrical output voltage and current for operation of said electrical device, said electrical interface including a controller executing a control procedure

for managing operation of said fuel cell assembly and said electrical device according to a predetermined control procedure; and

a housing enclosing said fuel cell assembly and said electrical interface circuit.

9. A power pack according to claim 8, wherein said fuel cartridge is specifically adapted for use with a power pack specifically designed for a specific model of an electrical device and mounts to the device at a dedicated power coupling port.

10. A power pack according to claim 8, wherein the interface circuit comprising:

a DC-DC voltage boost circuit operating with an output voltage related feedback signal;

a storage capacitor coupled to and receiving charge generated by said boost circuit; and

a microcontroller coupled to said boost circuit for controlling operation or non-operation of said boost circuit.

11. A power pack according to claim 8, wherein the electrical device comprises a laptop or palmtop computing device.

12. A power pack according to claim 8, wherein the electrical device comprises a communication device.

13. A power pack according to claim 8, wherein the electrical device comprises a cellular telephone.

14. An interface circuit for a fuel cell powered electronic device comprising:

a DC-DC voltage boost circuit operating with an output voltage related feedback signal;

a storage capacitor coupled to and receiving charge generated by said boost circuit; and

a microcontroller coupled to said boost circuit for controlling operation or non-operation of said boost circuit.

15. An interface circuit as in claim 14, wherein the interface circuit is specifically adapted for use with a specific model of a cellular phone.

16. An interface circuit as in claim 14, wherein the interface circuit is adapted to control and regulate power drawn from and charge and discharge of a fuel cell and maintain safe operation within predefined voltage, current, and power ranges.

17. A method of controlling operation of a voltage boost converter circuit coupled to a fuel cell and another energy storage device.

18. A method for boosting a lower fuel cell voltage up to higher voltage for operation of an electrical device selected from the set of devices consisting of a cellular phone, a laptop computer, a palm top computer, a PDA, a radio, a radio-frequency transmitter, a radio-frequency receiver.

19. An interface circuit as in Clam 14, wherein said interface circuit further comprises a battery and said voltage boost circuit limiting a battery charging current to a predetermined current less than a current that would damage said battery.

20. An interface circuit as in Clam 14, wherein said boost circuit boosting the fuel cell voltage to a higher voltage level and for supplying charge to capacitive and battery storage devices within the circuit.

21. An interface circuit as in Clam 14, wherein said microcontroller monitors at least a sample of the fuel cell output voltage to determine when to operate the boost circuit.

22. An interface circuit as in Clam 21, wherein said microprocessor is adapted to execute computer program instructions to modify and control the operation of the microcontroller.

23. An interface circuit as in Clam 22, wherein the computer program instructions include an instruction to perform a fuel cell load test including applying an incremental load

to the fuel cell and determining a resulting fuel cell output voltage, the fuel cell load test being failed if the fuel cell in unable to maintain a predetermined output voltage level.

24. An interface circuit as in Clam 23, wherein the boost circuit is not turned on or turned off if the fuel cell load test is failed.

25. An interface circuit as in Clam 23, wherein the load test is performed only on the expiration of a counter count so that the load test is performed less frequently than ever execution cycle of a set of instructions executing in said microprocessor.

26. An interface circuit as in Clam 23, wherein operation of the boost circuit is further regulated by hardware components that include feedback control elements.

27. An interface circuit for a fuel cell powered information appliance comprising:

a DC-DC voltage boost circuit operating with an output voltage related feedback signal to boost a lower fuel cell output voltage to a higher voltage operating voltage of said cellular telephone;

a storage capacitor and a storage battery coupled to and receiving charge generated by said boost circuit, said boot converter circuit further operating to limiting a storage battery charging current to a predetermined current less than a current that would damage said storage battery; and

a microcontroller adapted to execute instructions to modify and control the operation of the microprocessor and coupled to said boost circuit for controlling operation or non-operation of said boost circuit based on a fuel cell output voltage;

said interface circuit being adapted to control and regulate power drawn from and charge and discharge of a fuel cell and maintain safe operation within predefined voltage, current, and power ranges, and said cellular telephone having a power consumption ranging between substantially 10 watts and 60 watts and an operating voltage range between substantially 5 volts and 20 volts.

28. A power pack specifically adapted to replace a battery for a laptop computer having a laptop computer body, said power pack comprising:

a fuel cell assembly;

a housing adapted to removably engage the laptop computer body, said housing enclosing said fuel cell assembly and said fuel cartridge; and

an interface circuit including: a DC-DC voltage boost circuit operating with an output voltage related feedback signal; a storage capacitor coupled to and receiving charge generated by said boost circuit; and a microcontroller coupled to said boost circuit for controlling operation or non-operation of said boost circuit.

29. A method of controlling a fuel cell power pack to provide electrical energy to operate an electronic device.

30. A method of controlling a fuel cell power pack as in Claim 29, wherein the electronic device comprises a computer.